

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-26. (canceled)

27. (original): An in-building network system comprising:

an electrical distribution board that receives an electrical power cable that is connected to an electrical distribution line and a signal cable that is connected to a network, and an outlet box that is connected to the electrical distribution board through in-building complex cables including an electrical distribution cable and an optical fiber cable, wherein the outlet box is equipped with an electrical plug receptor section that receives an optical fiber connector; and

a gate that opens an opening section of the optical fiber connector receptor section when a tip of the electrical plug is inserted in the electrical plug receptor section and closes the opening section of the optical fiber connector receptor section when the tip of the electrical plug is pulled out the electrical plug receptor section.

28. (currently amended): An in-building network system according to claim ~~24 or claim~~ 27, wherein the electrical signal input/output terminal is an IEEE 1394 serial interface cable connection terminal.

29. (original): An in-building network system comprising:

an electrical distribution board that stores a signal cable connected to a communication network and an electrical power cable connected to electrical distribution cables, the electrical distribution board comprising in-building electrical distribution breakers inserted between the electrical power cable and in-building electrical distribution cables, a gateway that interfaces between the communication network and the in-building network, and a plurality of optical repeaters, each having a bi-directional conversion function between an electrical signal and an optical signal and having an electrical signal input/output terminal that is connected to an electrical signal input/output terminal for in-building

network connection of the gateway and an optical signal input/output terminal that inputs and outputs a signal corresponding to an electrical signal provided by the bi-directional conversion function and is connected to an optical fiber cable of the in-building network; and

an outlet box that stores an end of an in-building complex cable including the in-building electrical distribution cable and the optical fiber cable, the outlet box comprising an electrode plug receptor section that is connected to the in-building electrical distribution cable, a plurality of optical repeaters, each having a bi-directional conversion function between an electrical signal and an optical signal and having an optical signal input/output terminal that inputs and outputs an electrical signal corresponding to the optical signal provided by the bi-directional conversion function, and a pair of serial interface cable connection terminals that is connected to the electrical signal input/output terminal of the optical repeater.

30. (original): An in-building network system comprising:

an electrical distribution board that stores a signal cable connected to a communication network and an electrical power cable connected to electrical distribution cables, the electrical distribution board comprising in-building electrical distribution breakers inserted between the electrical power cable and in-building electrical distribution cables, a gateway that interfaces between the communication network and the in-building network, and a plurality of optical repeaters, each having a bi-directional conversion function between an electrical signal and an optical signal and having an electrical signal input/output terminal that is connected to an electrical signal input/output terminal for in-building network connection of the gateway and an optical signal input/output terminal that inputs and outputs a signal corresponding to an electrical signal provided by the bi-directional conversion function and is connected to an optical fiber cable of the in-building network; and

an outlet box that stores an end of an in-building complex cable including the in-building electrical distribution cable and the optical fiber cable, the outlet box comprising an electrode plug receptor section that is connected to the in-building

electrical distribution cable, a plurality of optical repeaters, each having a bi-directional conversion function between an electrical signal and an optical signal and having an optical signal input/output terminal that is connected to the optical fiber cable and an electrical signal input/output terminal that inputs and outputs an electrical signal corresponding to the optical signal provided by the bi-directional conversion function, and a serial interface cable connection terminal that is connected to the electrical signal input/output terminal of the optical repeater.

31. (original): An in-building network system comprising:

an electrical distribution board that stores an end of an electrical power cable connected to an electrical distribution cable, the electrical distribution board comprising in-building electrical distribution breakers inserted between the electrical power cable and an in-building electrical distribution cable, a gateway that interfaces between the communication network and the in-building network, a plurality of optical repeaters, each having a bi-directional conversion function between an electrical signal and an optical signal between an electrical signal input/output terminal and an optical signal input/output terminal, and having an electrical signal input/output terminal that is connected to an electrical signal input/output terminal for in-building network connection of the gateway, wherein the optical signal input/output terminal is connected to an optical fiber cable of the in-building network, and herein the gateway is externally attached to a casing that stores the in-building distribution breaker and the optical repeater; and

an outlet box that stores an end of an in-building complex cable including the in-building electrical distribution cable and the optical fiber cable, the outlet box comprising an electrode plug receptor section that is connected to the in-building electrical distribution cable, a plurality of optical repeaters having a bi-directional conversion function between an electrical signal and an optical signal and having an optical signal input/output terminal that is connected to the optical fiber cable and an electrical signal input/output terminal that inputs and outputs an electrical signal corresponding to the optical signal provided by the bi-directional conversion

function, and a serial interface cable connection terminal that is connected to the electrical signal input/output terminal of the optical repeater.

32. (original): An in-building network system according to any one of claim 29 through claim 31, wherein each of the electrical distribution board and the outlet box is equipped with an independent power supply source for driving the optical repeater stored therein.

33. (original): An in-building network system according to any one of claim 29 through 31, wherein each of the electrical distribution board and the outlet box is equipped with an independent power supply source for driving the optical repeater stored therein, wherein electrical power is supplied to the independent power supply source from the in-building electrical distribution cable.

34-35. (canceled)

36. (original): An in-building network system comprising:
an electrical distribution board that receives an electrical power cable that is connected to an electrical distribution line and a signal cable that is connected to a network and an outlet box that is connected to the electrical distribution board through in-building complex cables including an electrical distribution cable and an optical fiber cable,

wherein the outlet box stores an end of the in-building complex cable and having an electrode plug receptor section that is connected to the in-building electrical distribution cable and a serial interface cable connection terminal for in-building network;

an electrical cord including a power supply line that supplies power supply electrical power to an appliance and a signal cable that connects the appliance and the in-building network;

a plug to be connected to the outlet box, being provided at one end of the electrical cord, and having an electrode plug that is electrically connected to the power supply line and a serial interface plug that is electrically connected to the signal cable; and

an appliance that is connected to the other end of the electrical cord.

37. (original): An in-building network system comprising:

an electrical distribution board that receives and electrical power cable that is connected to an electrical distribution line and a signal cable that is connected to a network and an outlet box that is connected to the electrical distribution board through an in-building complex cable including an electrical cable and an optical fiber cable, wherein the outlet box stores an end of the in-building complex cable and having an electrode plug receptor section that is connected to the in-building electrical distribution cable and an optical fiber connector receptor section for in-building network;

an electrical cord including a power supply line that supplies power supply electrical power to an appliance and an optical fiber cable that connects the appliance and the in-building network;

a plug to be connected to the outlet box, being provided at one end of the electrical cord, and having an electrode plug that is electrically connected to the power supply line and an optical fiber connector that is connected to the optical fiber cable; and

an appliance that is connected to the other end of the electrical cord.